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ACKNOWLEDGMENTS

The Exeter River Corridor and Watershed Management Plan represents a collaborative effort involving the NH Department of Environmental Services, NH Office of State Planning, NH Fish and Game Department, Audubon Society of NH, University of New Hampshire Complex Systems Research Center, University of New Hampshire Cooperative Extension Service, US Environmental Protection Agency, Rockingham Planning Commission, and the Exeter River Local Advisory Committee. Funding for this project was provided by the US Environmental Protection Agency - Region 1, and the Audubon Society of NH. The project was overseen by the following individuals:

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For more information on ERLAC and the Exeter River Watershed Project, please contact: Rockingham Planning Commission, 156 Water Street, Exeter, NH 03833 (603) 778-0885

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Organizations and Agencies that Can Assist with Natural Resource Protection

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PRIORITY - PROTECT SCENIC, RECREATION, AND HISTORIC RESOURCES

Broad wetlands, forested riverbanks, and gently-flowing waters interrupted by short stretches of rapids and falls, combine to make the Exeter River and its tributaries an important scenic resource. From the river, few signs of development are visible. Scenic views of the river are afforded from a number of bridge crossings in the watershed. Over eighty percent of respondents to both surveys said they valued the scenic beauty of the watershed.

The Exeter River provides excellent flatwater and quickwater boating opportunities for canoes and kayaks. Whitewater boating is limited to high water conditions. A five mile section of the river above Fremont has been described in an Appalachian Mountain Club Boating Guide as "...the finest on the river for scenery...and probably the best quickwater in the region." Public and informal launching areas found at bridge crossings provide access to the river. Motorized boating opportunities are generally limited to deeper areas of the river behind the Great Dam in Exeter. Power boats are limited to wake speed of six m.p.h.

Seventy percent of riverfront landowners responding to ERLAC's survey said that they enjoyed fishing in the river. Fishing is especially popular in the upper reaches of the Exeter River near traditional stocking points. The river is stocked annually with brook, brown, and rainbow trout by the NH Fish and Game Department.

Swimming, hiking, birdwatching, and camping are other recreational activities that people enjoy on or near the Exeter River. The Town of Exeter owns conservation land and a public park adjacent to the river. The conservation land provides access to the river for canoeing as well as opportunities for hiking, jogging, skiing, and fishing. In Sandown and Fremont, an abandoned railroad bed, owned by the State of New Hampshire, provides multiple-use recreational opportunities. There are a number of privately owned campgrounds located next to the river that have facilities for seasonal camping. Over fifty percent of survey respondents stated they used the river for canoeing and kayaking.

There are a number of sites of historic interest along the Exeter River. Many buildings in the

area were constructed during the early 1700's, and there are numerous Native American and colonial archaeological sites. In Exeter, there is a local historic district that is listed in the National Register. Several houses in Fremont are also eligible for national listing.

Many groups are active in land protection in the watershed. Conservation Commissions, the Rockingham Land Trust, the Rockingham Planning Commission, Rockingham County Conservation District, Audubon Society of NH, and the Society for Protection of NH Forests have worked with landowners to identify and permanently protect hundreds of acres in the watershed.

Additional information on scenic, recreation, and historic resources, and protected lands can be found in the *Natural Resources*Inventory

GOALS:

- Maintain, protect, and enhance the scenic and historic attributes of the watershed.
- Maintain, protect, and provide a balance of outdoor recreational activities.
- Acquire conservation easements along the Exeter River for passive recreational use, protection of wildlife habitat, and watershedbased land protection.

Recommended Actions for 1999 - 2000

- ERLAC, Conservation Commissions, and Parks and Recreation Departments develop a database of all existing recreation (including trail systems and fishing and hunting spots) and scenic sites, on public and private lands in the watershed to help determine if more of these resources are needed and if they require protection.
- ERLAC and Historic Commissions develop an inventory of sites of historical significance in the watershed.

Recommended Actions for 2000 - 2001

- ERLAC work with Exeter River Stewards (see Education and Outreach priority) to maintain a canoeable path down river where feasible.
- ERLAC work with NH DOT and Road Agents to provide canoe access where road improvements occur at river crossings.
- ERLAC and Conservation Commissions develop educational materials about the scenic, historic, and recreational sites in the watershed to increase awareness of the resource and to encourage responsibility among residents and visitors.

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PRIORITY - PROTECT WILDLIFE HABITATS AND NATURAL COMMUNITIES

The Exeter River watershed supports a variety of landscapes including wetlands, forests, surface waters, agricultural lands and unique natural communities. These provide habitat for a wide diversity of plants and animals. The physical features of the watershed are important determinants of the floral and faunal species present. All of the watershed falls within the Gulf of Maine Coastal Plain eco-region dominated by hardwood and transitional forests of oak and hickory, hemlock and white pine. The watershed is at the heart of the region supporting



several species of concern in New Hampshire. These include spotted and Blanding's turtles, New England cottontail, and the blue spotted salamander. As well, a number of bird species reach their northern limits in the coastal plain area of New Hampshire.

Historically, natural disturbances such as fire, beaver activity and wind-throw helped to create a diversity of

forest types and age classes. Human intervention has altered some of the natural disturbance regime. Presently, good forest management and the re-establishment of beavers in the watershed may be providing the only disturbances that are creating the necessary diversity in the forests.

During the last one hundred years, the types of habitat found in the watershed have changed drastically, leading to changes in the wildlife present. In 1860, approximately 80 percent of the region was open agricultural land. Presently, only 6 percent of this type of land use remains. This change has led to a reduction in the numbers of grassland birds and simultaneously has increased the number of white-tailed deer and black bear that can be found in the region.

While many areas within the watershed have been fragmented by roads and residential and commercial development, there still exist several areas greater than 1000 acres of unfragmented wildlife habitat within the watershed. These large areas are important to a number of the mammal species (moose, black bear) found in the region that require large home ranges. For many forest dwelling birds large tracts are critical to successful breeding. In areas of fragmentation, species such as northern goshawk and black-throated blue warblers soon disappear from the breeding bird population. The river connects these large

unfragmented tracts of land in the upper watershed (Chester, Raymond and Sandown) with the large wetland systems found in Brentwood and Exeter. As a tributary to the Great Bay Estuary, the Exeter River plays an important role in maintaining the overall ecological health of this estuary of national significance.

The fragmentation of the watershed with new and expanded highways has had a serious negative impact on wildlife. Long-lived, slow-maturing species such as the Blanding's turtle have suffered not only from loss of habitat but also expanding transportation infrastructure which isolates them from breeding and feeding sites by requiring the crossing of highways. For species such as this, that reproduce in very low numbers, "road kill" can destroy local populations.

The construction of dams along the Exeter River has changed formerly flowing waters into a series of ponds and barred passage of migrating fish. The recent construction of fish ladders at Great and Pickpocket Dams have once again allowed anadromous fish to return to spawn along some stretches of the River. The composition of fish populations has been drastically altered by the introduction of non-native species such as large and small-mouth bass and rainbow and brown trout. The introduction of these species has likely eliminated pure indigenous strains that were well adapted to local ponds and streams.

Wetland loss has also had an impact on many species. Nearly one-third of NH's native wildlife species rely on wetlands at some time during their life cycle. A recent study of wetlands impact which occurred in New Hampshire during 1995 found that Rockingham County had the largest percentage of wetland permits in the state - twenty nine percent, and the greatest percentage of wetland loss by county in the state - thirty percent. Direct loss of wetlands represents only a portion of the impact to wetland dependent wildlife. The secondary and cumulative effects of the loss of naturally vegetative buffers and degradation of water quality have also reduced the wildlife habitat value of many wetlands in the region.

To help ensure the continued presence of critical wildlife habitat, communities should develop a land conservation program to protect these large tracts of unfragmented land and other important areas.

The Natural Resources

Inventory completed for the watershed as part of this project has identified areas containing co-occurring natural resources of importance to the watershed. Appendix E contains valuable information on non-regulatory techniques for protecting natural resources. This information should be used to direct future activities in the region.

A document called *Integrating*Wildlife Habitat Into
Community Planning

was published by the NH

Fish and Game Nongame and Endangered Species Program as part of this project. This

document should be used by watershed communities interested in further developing information on important wildlife habitat areas within their communities. In addition, University of New Hampshire students have conducted several habitat inventories along the river. Their reports contain information on both plant and animal species found along the river corridor. For more information on these reports, please call the Rockingham Planning Commission at 778-0885.

GOAL:

 Protect, restore, and enhance lands and corridors for wildlife habitat, including species of special concern, as well as threatened and endangered species.

Recommended Actions for 1999 - 2000

- ERLAC and Conservation Commissions provide landowners with information on how to create and protect wildlife habitat.
- ERLAC, Conservation Commissions, Rockingham County Conservation District, Audubon Society of NH, and the Rockingham Land Trust work with owners of important habitat areas to protect their land from development through the voluntary donation of conservation easements.
- ERLAC and Conservation Commissions develop and maintain an inventory of important wildlife and plant habitats in the watershed to enable protection of these resources.

Recommended Actions for 2000 - 2001

- ERLAC work with the Audubon Society, NH Fish and Game, and UNH Cooperative Extension to establish a wildlife stewardship program in the watershed to encourage landowner involvement in habitat protection.
- ERLAC work with the Rockingham Planning Commission to initiate a cooperative effort between all Planning Boards and Conservation Commissions in the watershed to identify "prime" wetlands so that these areas can be protected from development activity.
- ERLAC work with landowners, Planning Boards, Conservation Commissions, and the NH Office of State Planning to implement regulatory and nonregulatory programs which maintain naturally vegetated buffers along the Exeter River and its tributaries.

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PRIORITY - PROTECT WATER QUALITY AND QUANTITY

When asked what characteristics of the Exeter River corridor should be protected, over 75 percent of respondents to the ERLAC landowners' survey and the survey sent to municipal officials selected water quality as a top priority. Water quality along the river is generally good. The river is the source of drinking water for Exeter, supports a wide variety of plant and animal life, and provides many types of recreational opportunities. It is designated a "Class B" river, which means it is swimmable and fishable and may be used for drinking water supplies after adequate treatment.

During the summer months, when precipitation and ground water levels drop, the river becomes slow moving, making it vulnerable to pollution. Water quality occasionally suffers from excessive algal growth from nutrients entering the water from septic systems, fertilizers, and surface run-off. For a summary of water quality data, refer to the *Natural*

Resources Inventory

Pollution problems are categorized in general terms as originating from either "point" or "nonpoint" sources. Point sources are discharges from pipes, such as those leading from sewage treatment plants, industrial facilities, and stormwater culverts. A nonpoint source is any site from which polluted runoff can occur, such as a construction site, parking lot, pasture, or heavily fertilized lawn. Nonpoint pollution is difficult to locate and correct and is recognized as the greatest threat to water quality both locally and nationally.

There is currently no permanent water quality monitoring program in the Exeter River watershed. During the summer of 1998, volunteers began monitoring water quality at a number of site along the river as part of the NH Department of Environmental Services Volunteer River Assessment Program.

Town ordinances that require adequate setback of septic systems from the riverbank and retention of shoreland vegetation can be effective in preventing pollution from effluent and runoff. Regulations vary widely among watershed communities. Refer to the

Review of Local Land Use Controls

prepared by the NH Office of State Planning

and Rockingham Planning Commission for specific recommendations for enhancing the implementation of goals in this plan.

Voluntary, permanent land protection by landowners in the watershed is another technique which can help protect water quality. Conservation easements, legal agreements between landowners and organizations that protect natural resources, restrict both the type and amount of development that may take place on land. Appendix E contains additional information on conservation easements and other non-regulatory techniques for protecting natural resources. In addition, the *Regional Open Space*

Plan developed by the Rockingham Planning Commission makes recommendations for coordinated natural resource protection among watershed communities.

Water quantity was also a priority raised by landowners and local officials. Property damage resulting from a flood in October 1996 raised awareness about development taking place in the floodplain and the need for both responsible maintenance of dams along the river as well as maintenance of river flow.

GOALS:

- Protect and enhance the water quality of the Exeter River and its tributaries.
- Achieve and maintain or surpass
 Class B quality standards.
- " water
- Maintain river flow and water quantity necessary to support plant and animal life and biological diversity in the watershed.

Recommended Actions for 1999 - 2000

- ERLAC work with Conservation Commissions and Code Enforcement Officials to develop educational materials for riverfront property owners on proper maintenance of septic systems to minimize threats to water quality.
- ERLAC work with Conservation Commissions to review exiting land use in the watershed to identify potential sources of point and nonpoint pollution.
- ERLAC work with the NH Department of Environmental Services to develop and implement a watershed-wide volunteer river monitoring program to gather data on water quality and flow.

Recommended Actions for 2000 - 2001

- ERLAC work with Planning Boards, Conservation Commissions, the NH Office of State Planning and the Rockingham Planning Commission to establish consistent environmental land use regulations.
- ERLAC work with Road Agents, Conservation Commissions and the NH Department of Transportation to place signs along state and local roads identifying the watershed to increase public awareness.
- ERLAC work local Road Agents and the NH Department of Transportation to manage road work adjacent to the river and its tributaries to prevent soil erosion and sediment entering the water from sand and salt application.

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RECOMMENDED ACTION PLAN

This action-oriented Management Plan is presented in four parts, based on each of the four priorities:

- Water Quality and Quantity
- Wildlife Habitats and Natural Communities
- Scenic, Recreation and Historic Resources
- Education and Outreach

Each part first briefly discusses a priority in terms of its watershed perspective and current status (for a more detailed discussion of the natural resources associated with each priority, reference should be made to the *Natural*

Resources Inventory

). This is followed by

a summary table providing a list of goals for that priority and a set of recommended actions required to achieve those goals.

The recommended actions that were identified as being of high priority are presented as achievable goals to be started in the years 1999 and 2000. This list is not intended to be exhaustive or restrictive. It simply provides a starting point for watershed communities to begin working towards achieving the stated goals for each priority. It is important to note that the lists of recommended actions are flexible, and may be subject to change based on periodic review and updating. Reference to the full list of recommended actions developed at the community worksession (Appendix D) will show that there are many more actions that can be addressed at some point in the future. The Management Plan is likely to be a long term project with many steps along the way. In its current form, the Plan provides the framework for raising awareness about, and working towards protection of the natural resources in the watershed.

Communities are also encouraged to take advantage of opportunities as they arise (and which may not be explicitly included as a recommended action). For example, funding may suddenly become available for a recommendation that is not included on the current listing. This recommendation should then be re-prioritized to take advantage of the situation.

One of the reasons why the list of recommended actions only goes as far as the year 2001 is

that this Management Plan is likely to evolve over time. For the Plan to work, it has to have flexibility. It is recommended that the watershed communities review current progress at the end of the year 2001, and project a modified set of actions to begin (or continue) over the next two years. It is further recommended that this review is conducted every two years. This allows the Plan to adapt to changing needs, and provides a means for monitoring progress and setting realistic goals.

The Exeter River Local Advisory Committee (ERLAC) will assume responsibility for overseeing the implementation of this Management Plan, and keeping communities informed of progress. Individuals who are interested in participating in the implementation phase should contact ERLAC through the Rockingham Planning Commission at 778-0885.

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THE EXETER RIVER WATERSHED: A DESCRIPTION

The Exeter River
Watershed covers an
area of approximately
67,700 acres in
Rockingham County. The
watershed includes
sizeable portions of
ten municipalities,
including Brentwood,
Chester, Danville, East
Kingston, Exeter,
Fremont, Kensington,
Kingston, Raymond and

Sandown.

1

The Exeter River flows 32 miles to the point where it changes its name to the Squamscott River (the tidal portion of the river) in Exeter. The Exeter/Squamscott River is one of the primary tributaries to New Hampshire's Great Bay. The Exeter River therefore plays an important role in maintaining the overall health of Great Bay and the surrounding environment (which includes the Exeter River Watershed).

The Exeter River rises from a group of spring-fed ponds in Chester, at an elevation of 430 feet. The River often meanders, frequently doubling back on itself, and passes through several short stretches of rapids in Brentwood. The watershed features a number of tributary streams, all contributing to the Exeter River. Major tributaries include the Little River (Brentwood/Exeter), Little River (Kingston), Fordway Brook, Wason Brook, Towle Brook, Wilson Brook, Phillips/Lily Pond drainage, and Great Brook.

Ponds are not a dominant feature of the landscape in the Exeter River watershed. Phillips Pond (Sandown) is the largest pond in the watershed at 85 acres. The remaining nine (named) ponds are relatively small and scattered through the watershed, having acreages of 20 acres or less.

The Exeter River system is characteristic of a "dendritic" or branching (tree-like) drainage

pattern, with smaller streams and tributaries feeding into the main channel. In the context of the watershed, these tributary streams are equally as important as the river itself with regard to water quality and quantity impacts.

There are 41 dams and dam sites in the watershed, impounding water primarily for storage and recreation. Nine of these dams are located on the mainstem of the Exeter River, including one in Brentwood for hydroelectric power production.

The watershed has gently undulating to rolling topography typical of the coastal plain. Large areas of wetlands occupy the lower lying portions of the landscape. Higher elevations and more hilly topography are found in the western part of the watershed around Sandown, Chester and Raymond. The maximum elevation of 640 feet is reached on the northwest boundary of the watershed.

The watershed is primarily rural and forested. Wetlands comprise 13 percent of the watershed, and agricultural use 8 percent. Approximately 11 percent of the watershed is classified as urban. The upper reaches of the watershed (including Chester, Raymond, Sandown and Danville), are characterized by scattered farms and single family residences. In the lower reaches of the river between Fremont and Exeter, urban development becomes more prominent, including industrial and commercial land use in addition to residential development. The river banks are well buffered by upland forest and wetland habitats in several sections, e.g. Sandown, Fremont, Danville; sections in Chester, Brentwood and Exeter. The watershed includes several extensive wetland systems, see the *Natural*

Resources Inventory discussion of wetlands.

for a more detailed

The watershed is home to a diverse population of wildlife. Deer and moose are common to the area, and osprey may be seen using the river corridor for migration during the spring and fall. The river serves as a spawning area for alewives and, to a lesser extent, blueback herring, shad, and other anadromous species, and provides year-round fisheries habitat for a diverse variety of freshwater fish.

¹A very small portion of each of five additional towns (Candia, Derry, Epping, Hampstead and Hampton Falls Falls) within with watershed. These towns comprise a relatively small portion of the watershed, and were not included in the Project.

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HOW THE MANAGEMENT PLAN WAS DEVELOPED

Two groups were instrumental in developing the Management Plan for the Exeter River corridor and watershed:

EXETER RIVER LOCAL ADVISORY COMMITTEE (ERLAC)

The Exeter River was accepted into the State of New Hampshire's Rivers Management and Protection Program in August 1995 as a "rural river." The State defines a rural river as a river with adjacent land predominantly used for forest management, agriculture, and dispersed residential development. The designated portion of the river extends from its headwaters in Chester to the point where Great Brook enters the river in Exeter. The section of the river between Great Brook and the dam in Exeter (where the name changes to the Squamscott River) was not included in the designation due to concern by the Exeter Board of Selectmen over pending state regulations which might limit the Town's ability to make withdrawals for its drinking water needs.

As required by the NH Rivers Management and Protection Program, the Exeter River Local Advisory Committee (known as ERLAC) was established in 1996 to develop and oversee a management plan for the Exeter River corridor, defined as the one-quarter mile width from each bank of the river.

ERLAC includes representatives from the seven communities through which the Exeter River flows: Chester, Sandown, Danville, Fremont, Raymond, Brentwood, and Exeter. Each town is permitted up to four volunteer members recommended by their boards of selectmen and appointed by the Commission of the NH Department of Environmental Services. ERLAC meets monthly to discuss issues concerning the Exeter River and the watershed. Contact the Rockingham Planning Commission at 778-0885 for more information.

EXETER RIVER WATERSHED PROJECT

The Exeter River Watershed Project began in 1996 as a collaborative effort between residents, local governments, and state, regional, and federal organizations to develop a watershed-level natural resource protection plan. The Project recommends regulatory and non-regulatory techniques to balance responsible future growth with adequate protection of important ecological resources.

The study area for the Project includes the Exeter River and its watershed - the land drained by all the tributaries contributing to the Exeter River listed above, and also includes portions of the

towns of Kensington, East Kingston, and Kingston.

PUBLIC PARTICIPATION

Members of ERLAC and the Exeter River Watershed Project worked together for three years to develop this single management plan that includes both corridor-specific and watershed-level issues.

Public participation was seen as a vital component of the plan development process, and was invited at several stages during the Project:

Spring and Fall, 1997

Exeter River Watershed Project staff held meetings with conservation commissions in each of the ten watershed communities to solicit input for identifying important natural resources, and to keep communities informed about the Watershed Project.

July, 1997:

To gather input from landowners, ERLAC sent a questionnaire to all riverfront landowners in the seven river corridor communities, approximately 530 people. The survey asked questions concerning how owners use their land, public use of the river, and what characteristics of the river corridor might be in need of protection. Over 150 landowners completed and returned the questionnaire, a 35 percent response rate. A summary of survey responses can be found in Appendix B.

August, 1997:

The Exeter River Watershed Project sent a questionnaire asking "How do you see your watershed?" to all municipal officials in the ten watershed communities. Copies of the questionnaire were also left in the town offices of each community so that interested residents would have an opportunity to provide input. Sixty questionnaires were completed and returned. A summary of survey responses is in Appendix C.

December, 1997:

A Community Work Session was held to brainstorm recommended actions to include in the Management Plan. Sixty people attended, representing almost all of the watershed communities. A summary of the list of recommended actions proposed at this meeting can be found in Appendix D.

SETTING GOALS AND PRIORITIES

Responses to the surveys sent to riverfront landowners and municipal officials were instrumental in setting initial priorities and goals. Four priorities were defined to provide a context for the Management Plan: Water Quality and Quantity; Wildlife Habitats and Natural Communities; Scenic, Recreation and Historic Resources; and Education and Outreach. ERLAC formed subcommittees to further research each of these issues. Goals, action steps, and responsible parties were identified for each priority. At the December 1997 worksession,

participants worked to refine these goals and brainstorm a list of recommended actions for achieving those goals.

This Management Plan takes the recommendations made at the worksession and the findings from the questionnaires and translates them into concrete action steps. A wealth of information to support this plan can be found in both the attached Appendices, the separate

Natural Resources

Inventory and the **Review of**

Local Land Use Controls

Please contact the Rockingham Planning Commission at 778-0885 to review these reports.

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WHAT IS THIS PLAN ABOUT?

The purpose of the Exeter River Corridor and Watershed Management Plan is to develop a shared vision for the future of the watershed: a healthy ecosystem with clean water and open spaces for human and wildlife communities, where people work together for mutual economic and environmental wellbeing. Its implementation depends on cooperative action between the Exeter River Local Advisory Committee (ERLAC), the watershed communities, and residents.

The Exeter River Corridor and Watershed Management Plan represents the combined efforts of the Exeter River Local Advisory Committee (ERLAC) and participants in the Exeter River Watershed Project (described below). It was developed with the advice and participation of community representatives, federal, state and local government agencies, and private citizens.

This Management Plan includes not only the river corridor, but also the entire watershed.

It has been an objective of this Plan to implement a holistic watershed management approach that integrates four priorities (Water Quantity and Quality, Wildlife Habitats and Natural Communities, Scenic, Recreation and Historic Resources, and Education and Outreach), builds a constituency by involving all the watershed communities, and incorporates available natural

resource information into the decisions that affect watershed management. The overall goal of the Exeter River Corridor and Watershed Management Plan is to work to restore and maintain the ecological integrity of the Exeter River and its watershed, to meet existing and future multiple uses and to protect its natural resources.

The Management Plan is the culmination of a three-year effort to make recommendations that will facilitate a better understanding of the issues facing the 70,000 acre Exeter River watershed. The plan is about people working together to understand what it takes to improve, maintain and enhance the quality of their watershed, and about charting a course that will ensure a healthy and viable river and watershed well into the future. The plan recommends the use of both regulatory and non-regulatory approaches to land protection measures for the long term preservation of valuable natural resources in the watershed.

Wherever possible, specific practices are listed that may be adopted by landowners or local government. The Plan is designed to be flexible, and can be updated and modified as goals are reached and new issues identified.

Community residents and leaders are key partners in the management plan.

Decisions made within the

watershed communities will have the greatest effect on the future health of the watershed. An objective of the plan is to encourage community planning initiatives that will protect natural resources while guiding growth in ways that maintain and improve the quality of life. While these may be done within individual communities, there is a need to coordinate activities among towns within the watershed since many resources are shared by more than one community - the river and wetland systems, for example. Broad-based support from the residents of the watershed communities will be essential for the successful implementation of the management plan. The actions recommended in the plan include a range from the readily accomplishable to the more visionary.

The Management Plan is comprised of two reports. This document provides the details of an action-oriented plan for the watershed. A separate report, entitled a

Natural Resources

Inventory of the Exeter

River Watershed , provides a broad-based inventory of natural resources in the watershed, including identification and evaluation of prioritized wetland resources. This inventory used computerized Geographic Information System (GIS) procedures to produce a series of maps showing natural resource data on a watershed basis. Reference should be made to this document for more detailed natural resource information. A copy of this report is on file with the Planning Boards in each of the watershed communities and at the Rockingham Planning Commission Office - 778-0885.

In addition, the Rockingham Planning Commission and the NH Office of State Planning completed a review of all local ordinances and regulations in the watershed. A

Review of Local Land

Use Controls makes specific recommendations for each watershed community to enhance the implementation of the goals and objectives of this Management Plan. A copy of this review is on file with Planning Boards and the Rockingham Planning Commission.

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PRIORITY - PROVIDE EDUCATION AND OUTREACH

Increasing public awareness of the Exeter River and its watershed is critical to the success of this Management Plan. Education is key to ensuring implementation of balanced natural resource protection measures. The willingness of people and communities to work together depends on an understanding of the importance of the watershed ecosystem and how it relates to their daily lives. Ultimately, people will protect what they care about, and they only care about things that they understand and appreciate.



While it is important to focus on educating school children and youth groups about protecting the natural resources of the watershed, people of all ages need to know more about how the ecosystem works, its healthy interrelationships, and ways to protect and restore them.

The creation of the Exeter River Stewards is a key action of this Management Plan. The Stewards will be comprised of interested volunteers who will work with ERLAC and other supportive groups on a wide variety of programs designed to educate school children and adults about the watershed.

ERLAC is actively recruiting volunteers to join the Exeter River Stewards. Please contact the Rockingham Planning Commission at 778-0885 for more information.

GOALS:

- Develop a watershedbased education and outreach program for landowners, supported by local planning boards and conservation commissions and land protection organizations.
- Promote stewardship of forest resources, encourage permanent land protection and the use of " Best Management Practices activities that impact the environment, such as forestry, agriculture, development, and transportation.

" in all

Recommended Actions for 1999 - 2000

- ERLAC work with the Rockingham Planning Commission and other agencies to secure funding for watershed projects to enable implementation of the Management Plan.
- ERLAC provide summaries of watershed activities and events to landowners, local officials and committees, and media to encourage understanding and support for the watershed.
- ERLAC develop a display about the river and its watershed for presentation at libraries, town halls, schools, and other public places to develop support for watershed protection.
- ERLAC develop a "River Stewards" program comprised of volunteers interested in providing education and outreach about the watershed to the general public.

Recommended Actions for 2000 - 2001

- ERLAC work with ASNH, UNH Cooperative Extension, and science teachers in the watershed to develop an Exeter River watershed ecology curriculum to foster awareness among students in the watershed.
- ERLAC, UNH Cooperative Exetension, Rockingham County Conservation District, and Exeter River Stewards develop outreach activities to work with landowners, municipal officials, and private individuals to encourage use of "Best Management Practices" and permanent land protection.

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SUMMARY

Watershed Communities are encouraged to work together to sustain their mutual economic and environmental well-being.

Well planned development goes hand-in-hand with conservation to complete the Management Plan. Both economic development and natural resource protection are vital for the health of our human communities. Land development and natural resource protection measures need to become partners for the long-term well-being of the Exeter River Watershed.

The protection of water quality and other natural resources cannot be accomplished without addressing issues of land use and development. How land is used in the watershed has a great influence on its overall health. Throughout the watershed, proper management of runoff from land used for farming, timber operations or development is very important. Much land use still involves clearing to the edge of wetlands and water bodies, and installing culverts that empty into those wetlands and waterbodies. The best long-term measures are adequate shoreline buffers. These upland buffers can protect water bodies and wetlands from the impacts of adjacent development. For more information on buffers, refer to the document entitled

Buffers for Surface Waters and Wetlands In New HampshireCommission - 778-0885.

available at the Rockingham Planning

The presence of natural resources, e.g. wildlife habitat (especially threatened species), prime farmland, and Native American archaeologic sites, does not necessarily mean that a parcel is undevelopable. Rather, careful and well-planned design is required to avoid impacts to the resources.

Watershed communities need to look at development and conservation as part of the same picture. The development potential of the watershed can be guided by its communities reaching consensus as they plan their futures. Without planning to guide development, the

growth that will occur over time will gradually displace the natural and community resources existing in the watershed today. A system of guidance to encourage well-planned development based on resource protection is needed at the local level.

The Exeter River Corridor and Watershed Management Plan fosters this spirit of intercommunity cooperation and participation. Communities are encouraged to work together to sustain their mutual economic and environmental well-being.

As part of this Management Plan, it is recommended that the watershed communities work to plan development so that natural and community resources are protected, to focus development in environmentally compatible areas to preserve or strengthen city, town and village centers, and to support resource-based economic activities such as farming, forestry and tourism. And finally, communities need to work on an integrated approach to resource planning by thinking and working on the watershed level as well as at the community level. This means creating opportunities for inter-community communication and cooperation.

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